

New York State Department of Transportation

Yellow Flag NB23U4W015

By: Malav Shah

Flag Date: April 26, 2023

Superseding Information:

No Flags Superseded

Structure Information

BIN: 1065318

Feature Carried: 278I278IX2M23027

Feature Crossed: 6TH AVENUE

Orientation: 8 - NORTHWEST

Region: 11 - NEW YORK CITY

County: KINGS

Political Unit: City of NEW YORK

Approximate Year Built: 1962

Posted Load Matches Inventory : Yes

Bridge Load Posting (Tons) : Not Posted for Load

Primary Owner: New York State Department of Transportation

Primary Maintenance Responsibility: 12 - State - Subcontracted to another Party

Typical or Main Span Type: 3 - Steel, 02 - Stringer/Multi-Beam or Girder

This Bridge is not a Ramp

Number of Spans: 322

Verbal Notification Information

Person Notified: Heinz Joachim, P.E.

Date: April 26, 2023 9:00:00 AM

Of: NYSDOT Region 11

Signature Information

Signature: Malav Shah, P.E. 106620-1

Date: May 25, 2023

Reviewed By: Robert Kemp

Date: May 25, 2023

Attachments: 9

Flagged Elements

Parent Element	Element	Total Quantity	Unit
Span Number : 256			
	113 - Steel Stringer	52	ft
	PR831 - Steel Beam End	40	each

Flagged Condition Description

This Yellow Flag No. NB23U4W015 is a new flag.

Location: Span 256, Stringer S1 at Pier 255.

The right face of the Stringer S1 (curb girder) in the upper web at the connection to Pier 255 exhibits a 6-1/2"W x 2-1/2"H corrosion hole. The web between the connection angle and the stiffener angle exhibits varying section loss from 1/8" to 3/16" (avg. 39%) deep section loss. The guide angle connecting leg at connection bolts has corroded completely and is missing for the full height. The left face of the stringer web also exhibits varying from 1/8" to 3/16" (avg.39%) deep section loss throughout, between the connection angle and the stiffener angle.

Notes:

1. Stringer S1 (curb girder) receives no direct live loading, but supports the barrier/railing above on I278.
2. The stiffener angle exhibits 1/16" to 1/8" section loss on the full face of the connecting leg and the outstanding leg of the stiffener angle exhibits heavy corrosion with up to 100% section loss on the full width x 6"H at the base of the leg. Adjacent to the end face of stiffener angle outstanding leg, the stringer web exhibits 1/8" to 3/16" section loss on 1" to 2"W x 12"H area. The guide angle on the left face of stringer web exhibits 100% section loss over 5"W x 7"H area of connecting leg. See sketch for detail.
3. Adjacent Girder G1 has 1/16" section loss (Full Height x up to 5"W) along the connection angle on both sides of the girder web.
4. The subject location was inspected as part of 2022 SILO inspection and CS-3 mini report was issued with following description:

The right side of web of Stringer S1 between the connection angle and the stiffener angle exhibits 1/8" to 3/16"D section loss. The upper web exhibits a 3"W x 1"H corrosion hole. The guide angle leg at connection bolts has corroded and is missing for Full Height. The left side web of Stringer S1 between the connection angle and stiffener angle exhibits 1/8" to 3/16"D section loss throughout. Adjacent to the stiffener angle the web exhibits a 1" to 2"W x 1'-0"H area with 1/8" to 3/16"D section loss. The stiffener angle exhibits heavy corrosion and up to 100% section loss at the bottom for 6"H. The bottom 6" of the guide angle exhibits 100% section loss.

5. A right single lane closure on 3rd Avenue Eastbound between 20th and 21st streets with a 60' bucket truck was used to access platforms installed by contractor for on-going construction/painting work, to inspect this location.

Flag Photographs

Photo Number: 1

Photo Filename: NB23U4W015 LOCATION PLAN.JPG

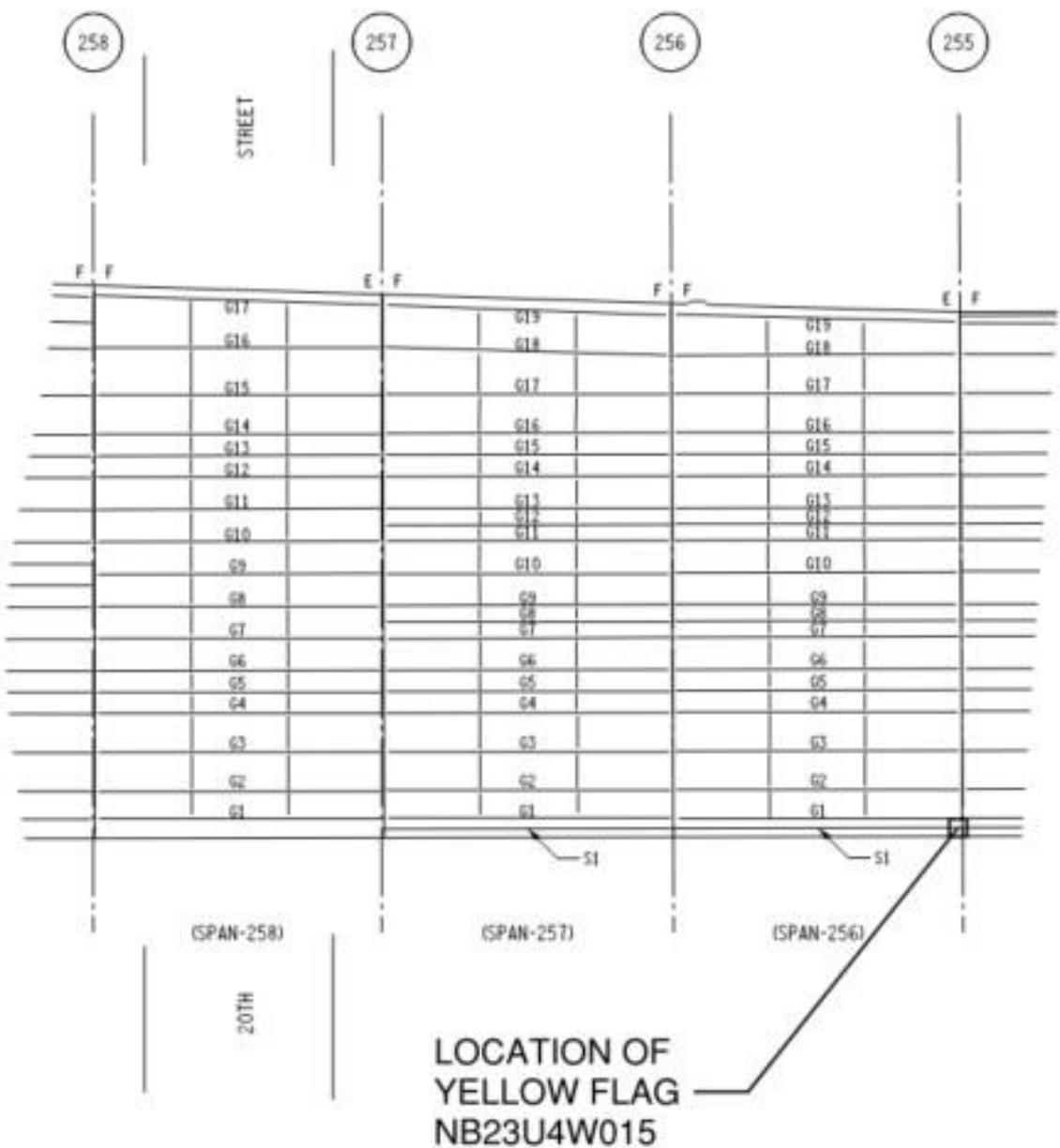
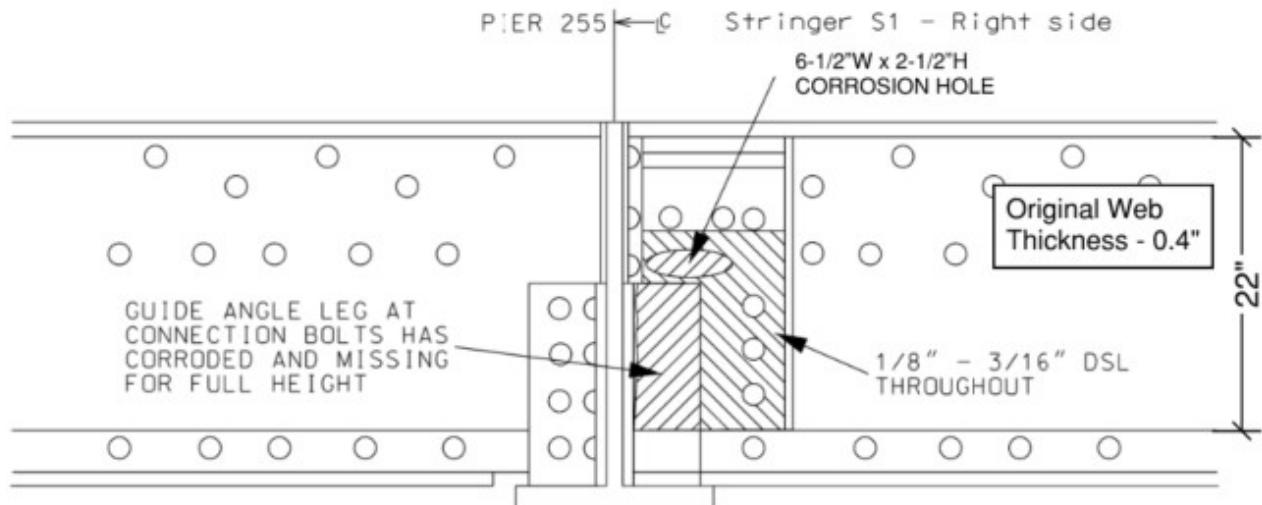
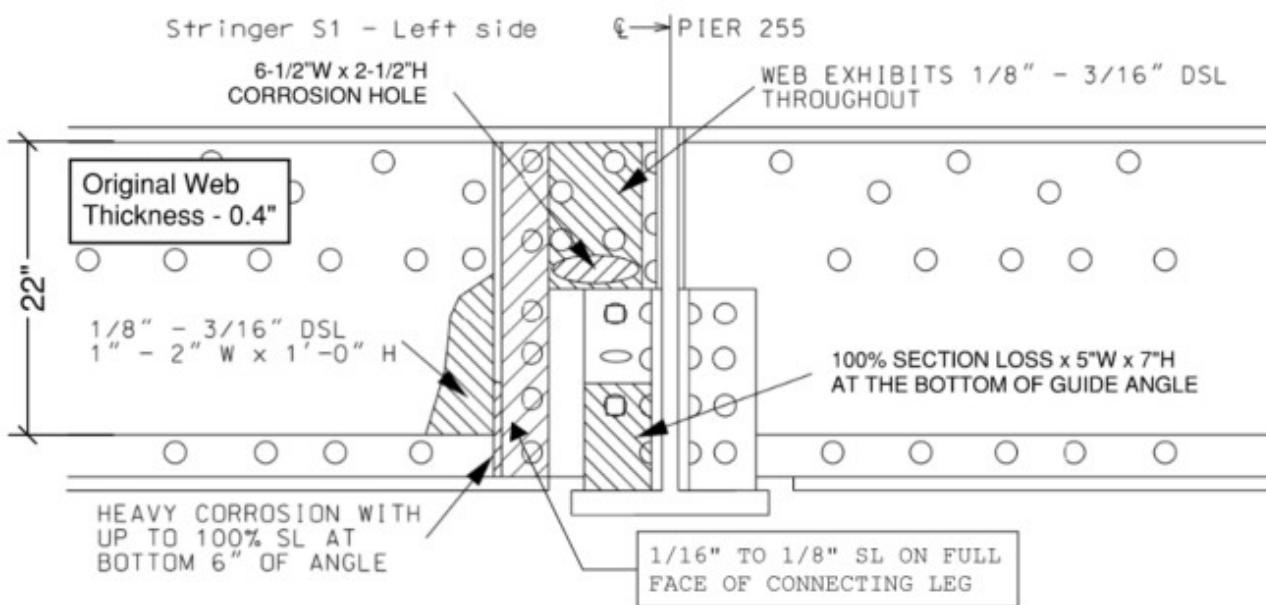
**Attachment Description: Flag Location Plan**

Photo Number: 2

Photo Filename: NB23U4W015_Condition Sketch.JPG



SPAN 256, STRINGER S1 AT PIER 255
(LOOKING LEFT)
N.T.S



SKETCH FOR YELLOW # NB23U4W015
SPAN 256, STRINGER S1 AT PIER 255
(LOOKING RIGHT)
N.T.S

Attachment Description: Flag Condition Sketch

Photo Number: 3

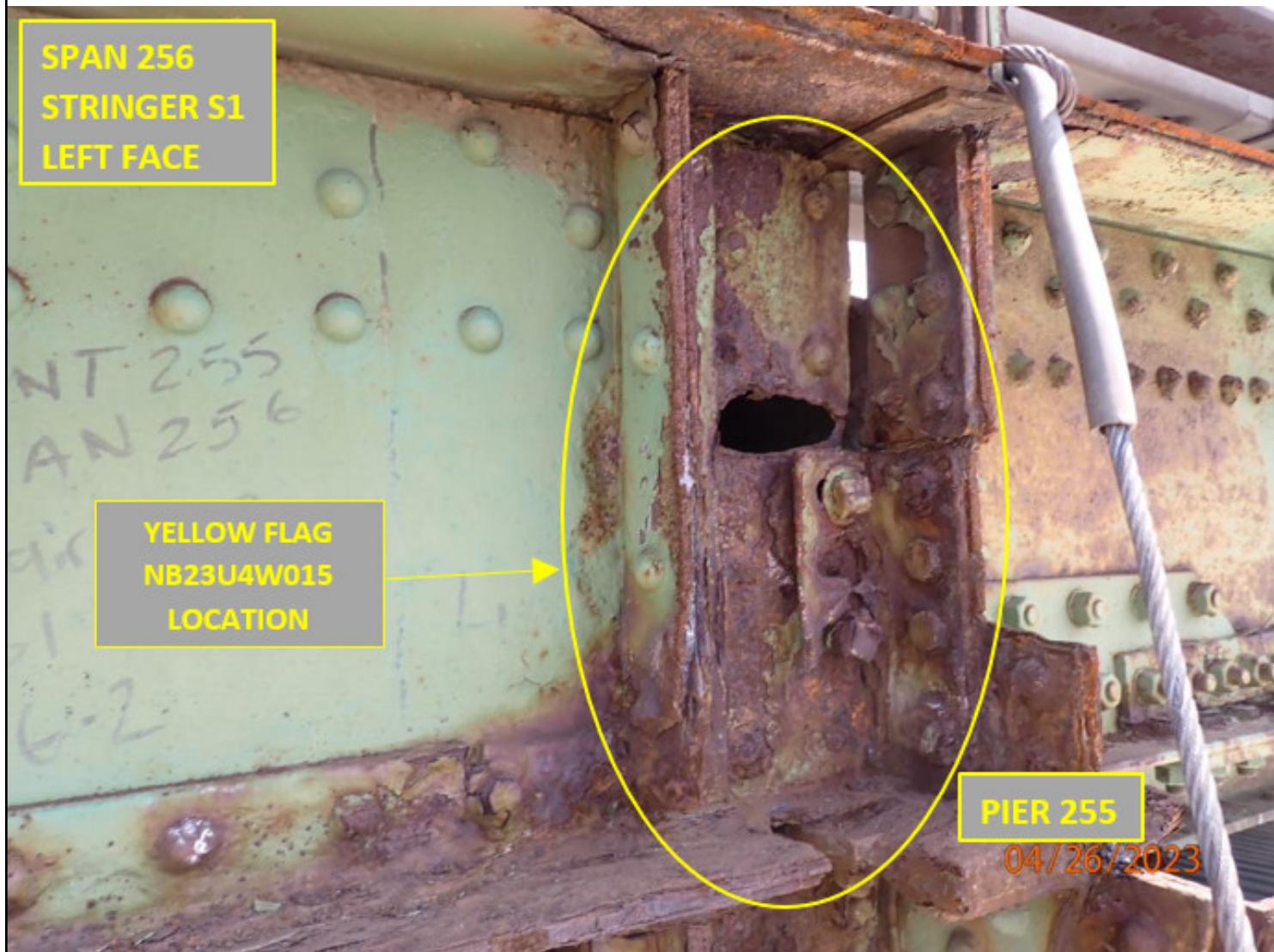
Photo Filename: SP 256 S1 @ P255 GV.JPG



Attachment Description: General View of Flag Location. Looking End

Photo Number: 4

Photo Filename: P4262668.JPG



Attachment Description: Span 256, Stringer S1 at Pier 255 Left Face. General view of the flagged location at pier cap connection. Looking Begin-Right.

Photo Number: 5

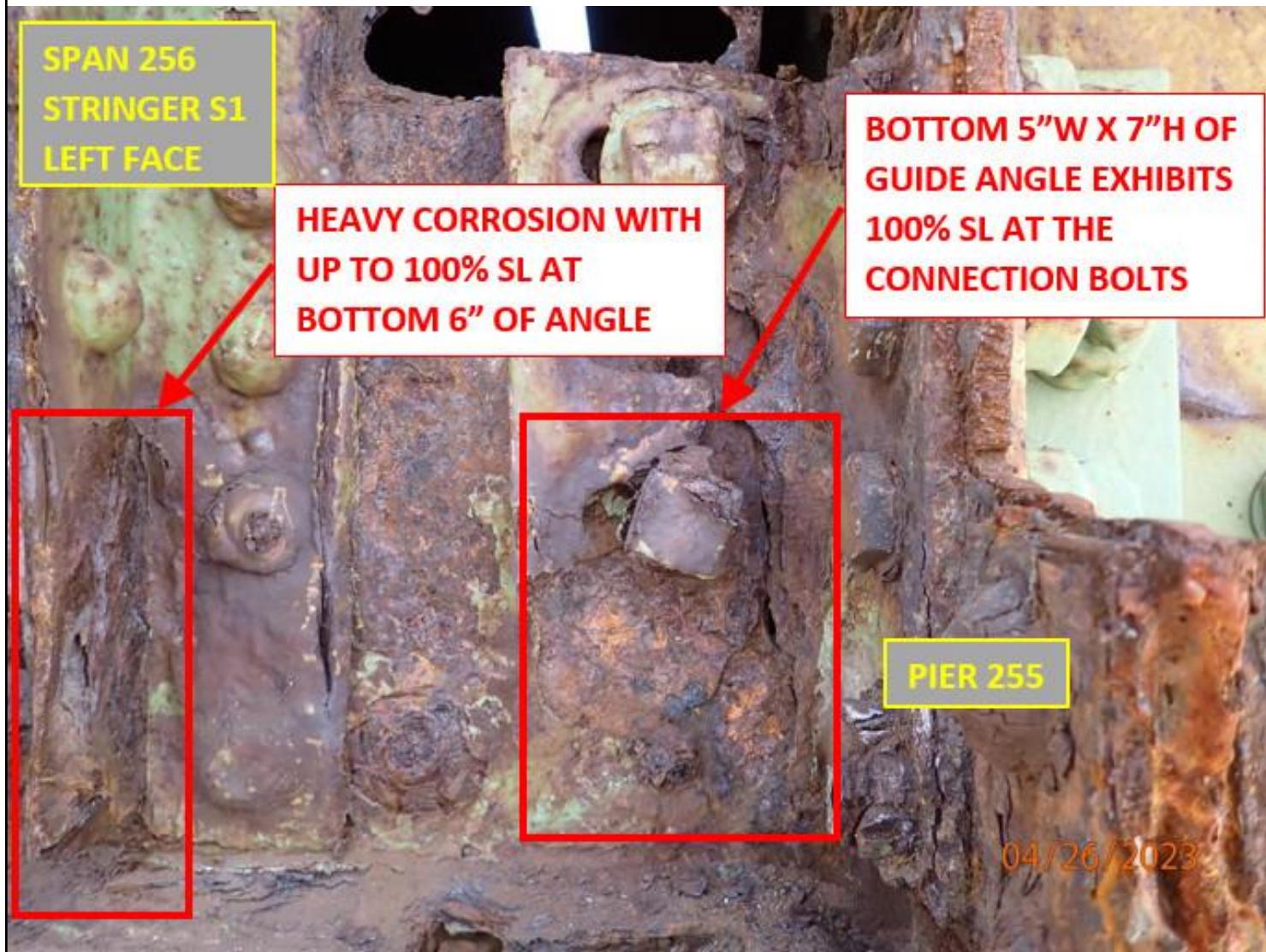
Photo Filename: P4262669.JPG



Attachment Description: Span 256, Stringer S1 at Pier 255 Left Face. Close-up view of flagged location. Looking Right.

Photo Number: 6

Photo Filename: P4262670.JPG



Attachment Description: Span 256, Stringer S1 at Pier 255 Left Face. Close-up view of flagged location: Heavy corrosion with up to 100% section loss at bottom 6" of stiffener angle; and the bottom 5" W x 7"H of guide angle exhibits 100% section loss at the connection bolts. Looking Right.

Photo Number: 7

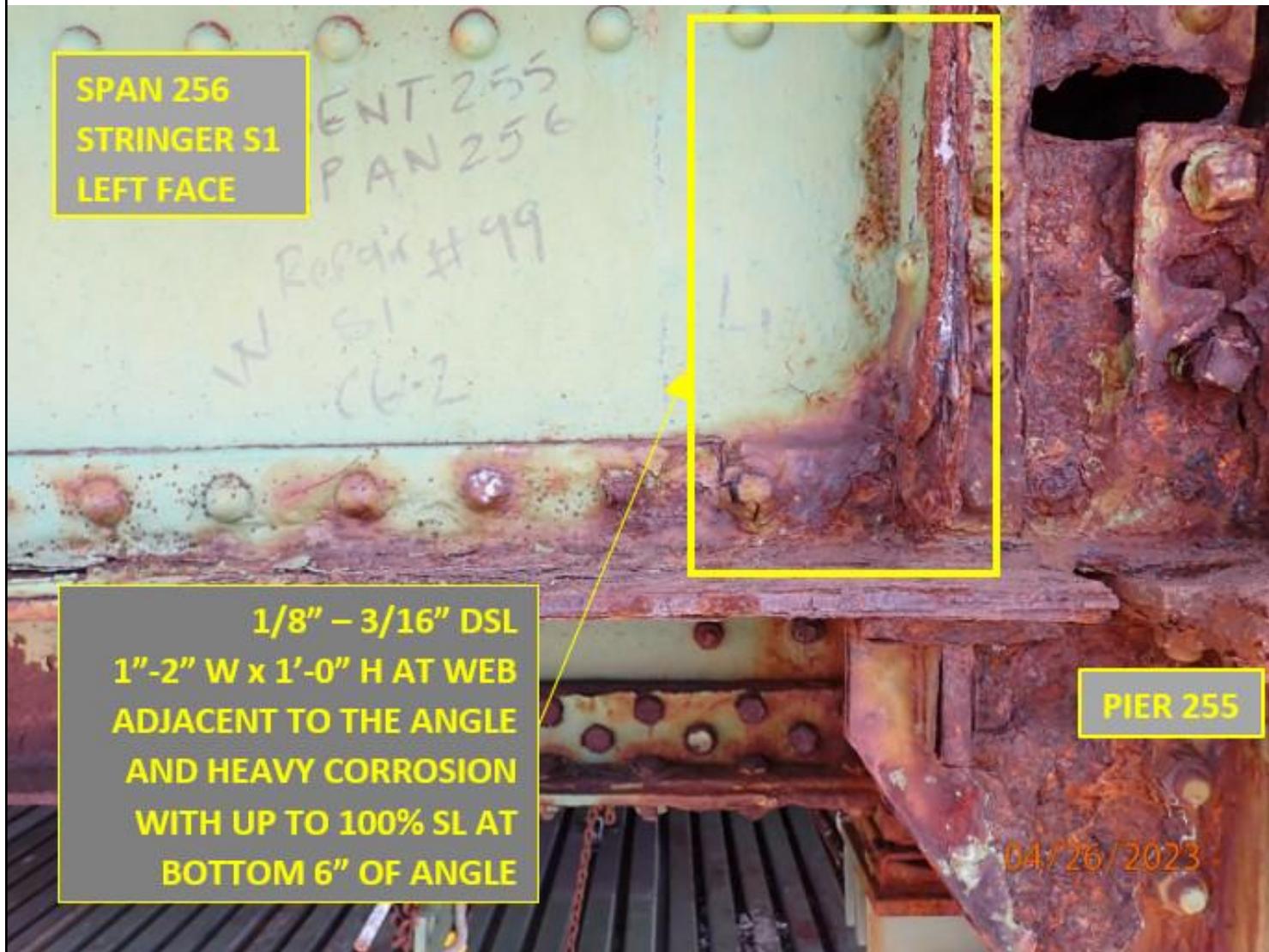
Photo Filename: P4262672.JPG



Attachment Description: Span 256, Stringer S1 at Pier 255 Left Face. Close-up view of flagged location: Web exhibits 1/8" – 3/16" D section loss throughout with a 6-1/2" W x 2-1/2" H corrosion hole. Looking Right.

Photo Number: 8

Photo Filename: P4262673.JPG



Attachment Description: Span 256, Stringer S1 at Pier 255 Left Face. Close-up view of flagged location: 1/8" – 3/16" D section loss x 1"-2" W x 1'-0" H at web adjacent to the angle and heavy corrosion with up to 100% section loss at bottom 6" of the angle. Looking Right.

Photo Number: 9

Photo Filename: P4262678.JPG



Attachment Description: Span 256, Stringer S1 at Pier 255 Right Face. Guide angle leg at connection bolts has corroded and missing for full height; the web has 1/8" – 3/16" D section loss throughout with a 6-1/2" W x 2-1/2" H corrosion hole. Looking Begin-Left.